WHAT IS CLAIMED IS:

1. A digital measuring head in a measuring apparatus which measures a work by making a contact element abut to the work, the digital measuring head comprising:

an arm supported rotatably around a support point arranged on a base;

a finger having the contact element at a tip end and mounted to a tip end portion of the arm; and

a scale and a read head, one of which is provided at a rear end portion of the arm and the other of which is arranged on the base,

wherein displacement of the contact element which contacts with the work is measured with the scale and the read head.